IN THE CLAIMS:

Please amend the claims as follows:

1-15. (canceled)

16. (currently amended) A method for determining the mass of a motor vehicle, comprising the steps of:

determining a vehicle acceleration from at least a time differential of vehicle speed, a slope descending angle and a rolling resistance coefficient;

determining vehicle forces, wherein the vehicle forces include

a driving force of a vehicle drive unit,

resistance forces resulting from rotational forces[,] and air

resistance, rolling resistance and the slope descending force, and

a braking force;

dividing the vehicle forces by the vehicle acceleration to obtain a vehicle mass value,

obtaining a plurality of vehicle mass values from a plurality of driving situations;

storing each of the plurality of vehicle mass values, and

determining a collective mass value from the stored plurality of vehicle mass values, wherein the plurality of vehicle mass values obtained from the plurality of driving situations are weighted differently.

17-18. (canceled)

19. (currently amended) The method of claim 16, wherein

in the step of determining vehicle <u>acceleration</u> ~~forces~~, the slope descending ~~force~~ <u>angle</u> determination includes determination of a roadway inclination from a relationship between an acceleration in the roadway direction determined by at least one longitudinal acceleration sensor installed in the vehicle, and a component of the acceleration in the roadway direction normal to a gravity direction.

20. (original) The method of claim 19, wherein

the component of the acceleration in the roadway direction normal to a gravity direction is determined from a satellite-based navigation system.

21-22. (canceled)

23. (currently amended) The method of claim 19, wherein

a vehicle body pitch angle is considered in determining the slope descending ~~force~~ <u>angle</u>.

24. (original) The method of claim 16, wherein

the braking force is estimated from operating data from a brake system installed in the vehicle.

25. (original) The method pursuant to claim 24, wherein

the braking force is determined from a braking pressure and an estimated

coefficient of friction between a brake lining and a brake disc.

26. (original) The method of claim 24, wherein

the operating data from the braking system is obtained when braking

without slippage between vehicle tires and the roadway.

27. (original) The method of claim 25, wherein

the operating data from the braking system is obtained when braking

without slippage between vehicle tires and the roadway.

28. (original) The method of claim 16, wherein

the braking force is determined from an evaluation of a path traveled

during a braking operation.

29. (original) The method of claim 19, wherein

at least one of the roadway inclination and the path traveled during a

braking operation is determined from a vehicle navigational system.

30. (currently amended) The method of claim 16, wherein

detectable offsets in at least one of the vehicle acceleration, driving force of

a vehicle drive unit, resistance forces resulting from rotational forces, air

resistance, rolling resistance and the slope descending ~~force~~ <u>angle</u> are corrected

prior to obtaining the vehicle mass value.

    31. (original) The method of claim 16, wherein

plausibility controls are provided.